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(54) Title: POLYMERASE INHIBITOR AND METHOD OF USING SAME

(57) Abstract: The present invention provides nucleic acid based polymerase inhibitors and methods for reducing non-specific polymerase extension and amplification in nucleic acid amplification reactions. The polymerase inhibitors provide a double stranded nucleic acid portion that is recognized by a polymerase enzyme as a template for extension but is incapable of being extended by the polymerase enzyme. The polymerase binds to the polymerase inhibitor which sequesters the enzyme until the temperature achieves a level that denatures the double stranded portion of the inhibitor after which the polymerase is released and can then catalyze nucleic acid extension.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/10029

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07H 21/04; C12N 15/11

US CL : 536/23.1, 24.5

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 536/23.1, 24.5

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

STN: EMBASE BIOSIS CAPLUS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2003/046149 A3 (WANG et al) 5 June 2003. entire document	1-27

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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